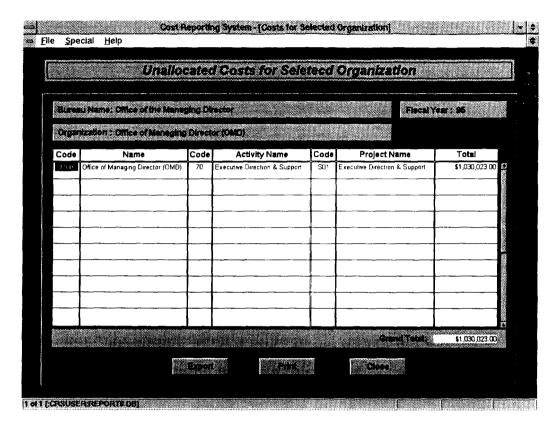


#### **Online Data View**

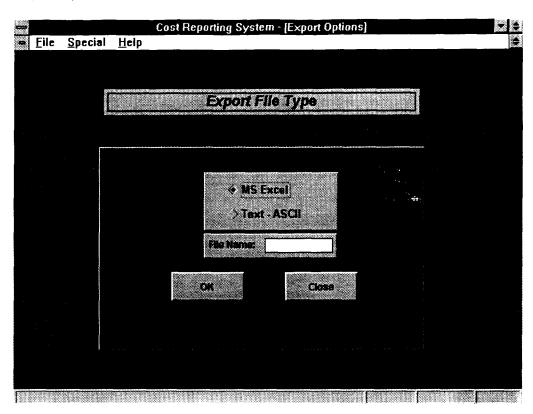


The user may choose any of the following options by clicking on the button:

- Export This button exports cost data to ASCII file or MS EXCEL Spreadsheet
- Print This button prints cost data
- ◆ Close This button returns user to the Summary Report Options Screen If the user clicks on the Export button, the following screen appears:

Figure 2-17

#### **Export Options**



The user must first select whether to export data to an ASCII text file or MS Excel Spreadsheet. The user must enter the name of the file to which the exported data will be saved. Note: The filename must not exceed 8 characters and should not include any type of extension. The system will attach the appropriate extension (e.g., '.txt.', '.xls') to the filename.

# 3 Bureau Cost Data Viewers

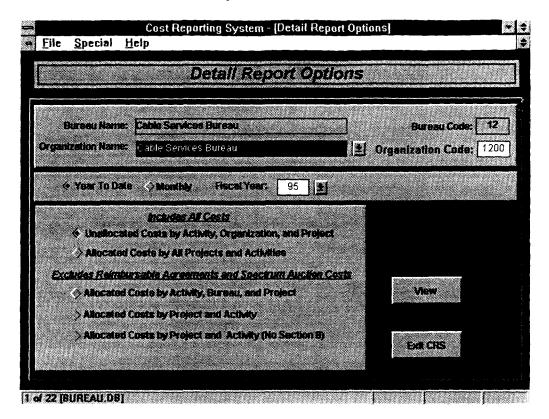
Bureau Cost Data Viewers may only view cost data for organizations within their assigned bureau. These users may look at the direct, indirect, and total costs for any fiscal year and period for all organizations within their bureau. These users view two main windows. Bureau Report Options and Online Data Views. The following sections explain each of these windows.

## 3.1 Bureau Report Options

After logging in, Bureau Cost Data Viewers see the following screen:

Figure 3-1

#### **Bureau Report Options**



Users must select the organization they want to view as well as whether the costs data should be year-to-date or for a particular period. If the data is to be year-to-date, users must indicate the fiscal year in the fiscal year drop down list box. This box contains a list of the available years to view. If a particular year is not listed, that is an indication that no cost data exists for that year. If the data to be viewed is monthly, users must indicate the fiscal year as well as the month in the fiscal year drop down list box and the period drop down list box. If a particular year and/or period is not listed, that is an indication that no cost data exists for that year and/or period.

After selecting the parameters of the type of data to view, users may select one of five available reports. The following is a list of the reports:

Unallocated Costs by Activity and Organization,

- Allocated Costs by Activity, Bureau, and Project Excluding Reimbursable Agreements and Spectrum Auction,
- Allocated Costs by Project and Activity Excluding Reimbursable Agreements and Spectrum Auction, and
- Allocated Costs by Project and Activity Including Reimbursable Agreements and Spectrum Auction, and
- Allocated Costs by Project and Activity Excluding Authorization of Service, Reimbursable Agreements, and Spectrum Auction.

If the user wishes to see all of the cost data for a selected bureau, the user may select "All" which, for all bureaus with more than one organization, is the first item in the organization name drop-down list box. Selecting "All" allows the user to view cost data by another report called Allocated Costs by Activity, Organization, and Project.

Users click on the OK button and are brought to the Data Views window.

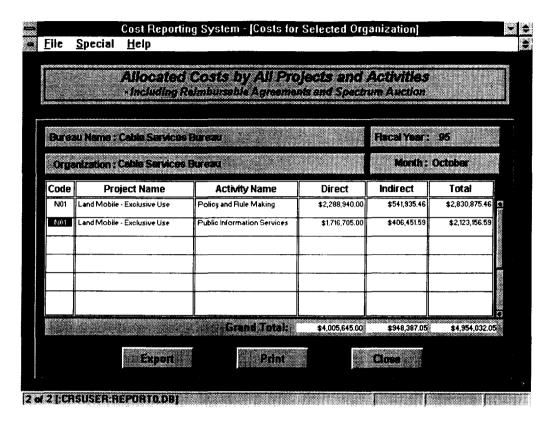
## 3.2 Online Data Views

The Online Data View window is an online view of the data based on the parameters the user selected on the Bureau Report Options window. The user has the option of printing the current view and/or exporting it to a text file.

The following is a sample of one of the Online Data Views.

Figure 3-2

#### Online Data View

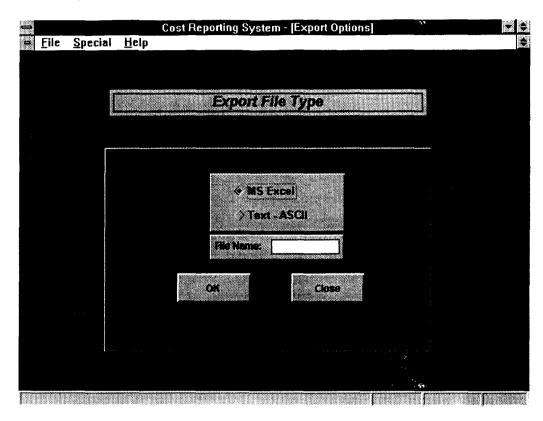


The user may choose any of the following options by clicking on the button:

- Export This button exports cost data to an ASCII file or MS EXCEL Spreadsheet
- Print This button prints cost data.
- ◆ Close This button returns user to the Summary Report Options Screen If the user clicks on the Export button, the following screen appears:

Figure 3-3

#### **Export Options**



The user must first select whether to export data to an ASCII text file or MS Excel Spreadsheet. The user must enter the name of the file to which the exported data will be saved. *Note: The filename must not exceed 8 characters and should not include any type of extension. The system will attach the appropriate extension (e.g., '.txt.', '.xls') to the filename.* 

# 4 System Access

Access to the Cost Reporting System is limited to FCC personnel who have been authorized either by the Office of the Managing Director or their Bureau/Office to view cost data.

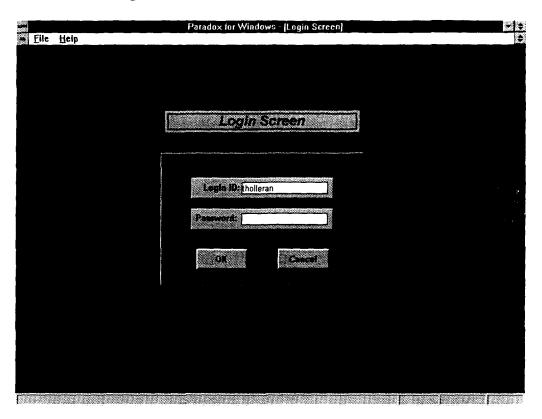
New users must contact the System Administrator for a User ID and a password before they can access the system. Users need to provide the System Administrator with their First Name, Last Name, and the name of their Bureau/Office.

# 4.1 Login

In order to gain access to the CRS, users must enter a valid User ID and password on the Login Screen. If a user wishes to exit the CRS, clicking on the Cancel button will do this.



#### Login Screen



#### 4.2 Passwords

Users will be assigned a log-in password by the system administrator. Users should change this password and not divulge the new password to anyone. Each screen has a pull-down menu option under the main menu item Special called "Password Change". Users select this option if they wish to change their password. Users must enter in their valid User ID, old password, and new password. If a user fails to enter the correct old password three times, the system will deactivate the User's ID and exit them from the Cost Reporting Application. In order to reactivate a User ID, the user must contact the system administrator.

## 4.3 Access Type

Access Type refers to whether a user can perform system maintenance on the Cost Reporting Application or simply view cost data. Only one individual should be assigned the Maintenance access. All others should be assigned to the View access.

Note: This documentation lists the System Administrator as being a part of the Office of the Managing Director. However, the system design allows the System Administrator to be an individual from any bureau, not just from OMD.

#### 4.4 Access Level

Access level refers to the level of cost information the user has access to view. There are currently two levels. They are ALL and BUREAU. An individual assigned to the access level of ALL may view costs data for all FCC organizations regardless of the bureau to which he or she belongs. An individual assigned to the access level of BUREAU may only view cost data for the organizations within his or her assigned bureau.

Note: Based on direction from the FCC project team, the determination was made that no individual from a Bureau/Office, outside of OMD, may view another bureau's cost data. However, the system has been designed so that users outside of OMD may be given access to view the cost data of all bureaus and organizations if so desired.

#### 4.5 Valid User ID

For security reasons, a User ID may be deactivated by two methods. The first is by the system administrator. If individuals no longer require access to the Cost Reporting application, the System Administrator may deactivate that individual's User ID through the User Table Maintenance option. User ID's cannot be deleted once they are used since they become part of the user activity log. The second method for User ID deactivation is if the user makes four unsuccessful attempts to change their old password. Four unsuccessful attempts may be an indication that someone is trying to use another person's User ID or that the user has simply forgotten the current password. In any event, the User ID is deactivated. The user must contact the System

Administrator to reactivate the User ID. As indicated above, reactivation can be done through the System Administrator's User Table Maintenance option.

### 4.6 PC Configuration

In order to run the Cost Reporting Application, the user must perform two steps. First contact the system administrator for a user ID and second, the user must make a copy of the PARADOX for Windows configuration file ODAPI.cfg. Below are the steps necessary to copy and to properly configure ODAPI.cfg. Failure to properly configure the ODAPI.cfg file may prevent a user from accessing the application and/or possibly from performing actions in the application.

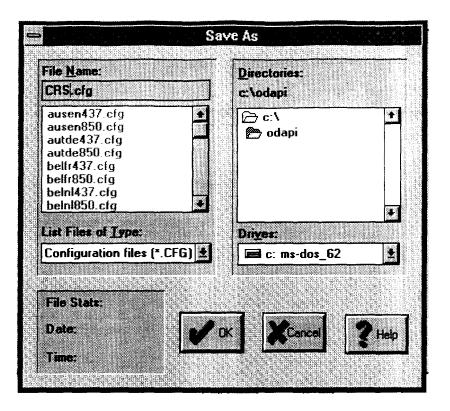
If a user has already set up a configuration file, then a new copy should not be made. Instead, these users should doublcick click on the Paradox for Windows ODAPI Configuration Utility icon (step #1 below), select the Alias icon, and follow the instructions starting with step #7.

Please note that the directory locations indicated in the following section may change. In order to ensure proper configuration, the user should contact their network administrator to verify the directory locations before proceeding.

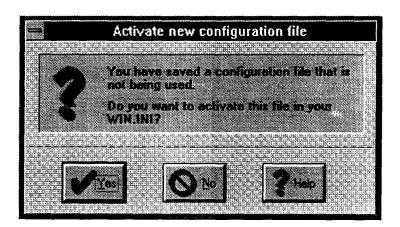
1. Double click on the Paradox for Windows ODAPI Configuration Utility icon.



- 2. From the File Menu, select SAVE AS.
- 3. Enter a file name. Please use the name CRS.cfg.



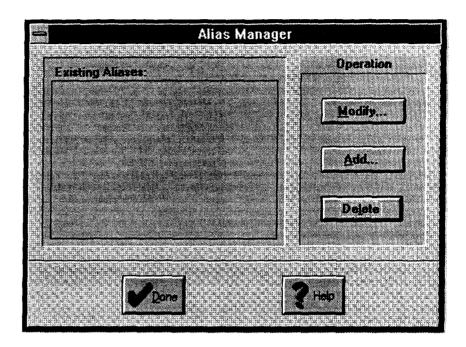
- 4. Click on OK
- 5. Select Yes in the Activate new configuration dialog box.



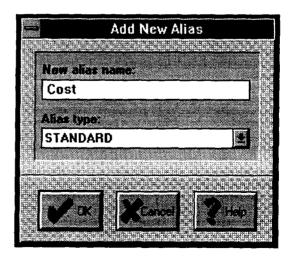
6. The title of the open window should now read ODAPI Configuration c:\odapi\crs.cfg. Select the Aliases icon on this window.



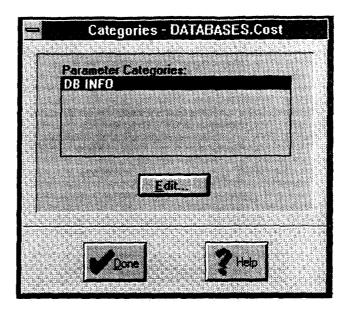
7. Select the Add button.



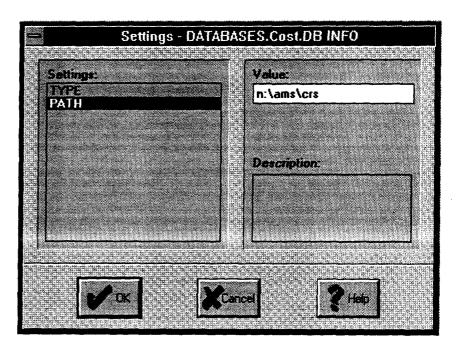
8. In the New alias name field, enter: Cost. Select the OK button.



9. Select the Edit button.



10. Select PATH and in the box Value enter: n:\ams\crs.



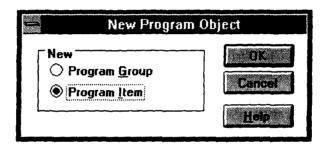
11. Select OK and then Done.

- 12. Repeat steps 7 through 11 creating an alias called CRSUser with a path location of C:\CRS
- 13. Exit the ODAPI Configuration Utility saving where prompted to do so.

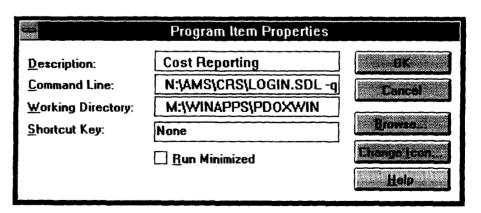
# 4.7 Cost Reporting System Application Icon

The Cost Reporting System application can be launched from Windows. In order to add the icon, perform the following steps:

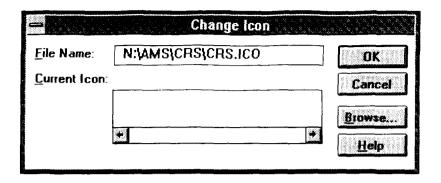
- 1. On your Windows desktop, select File New.
- 2. Select the Program Item option and select OK.



3. In the Description field enter: Cost Reporting. In the Command Line field enter: N: \AMS \CRS\login.SDL -q. In the Working Directory Line enter: M:\winapps\pdoxwin.exe. Select the Change Icon... button.



4. In the File Name Field, enter: N:\AMS\CRS\CRS.ICO. Select the OK button.



5. Select the OK button in the Program Item Properties dialog box.

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These steps will add the Cost Reporting System application icon to you desktop in the Main group.

Double clicking on the icon will launch the application.



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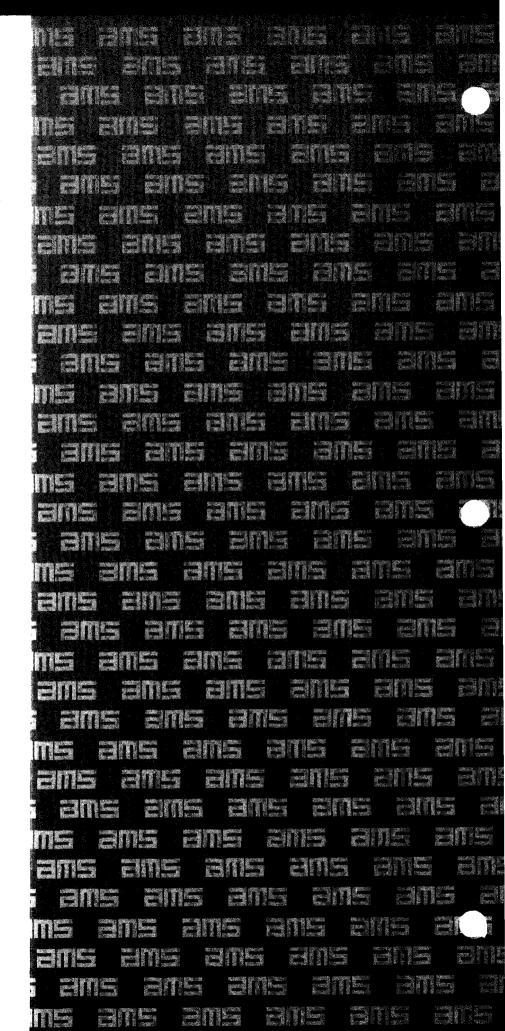
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# Cost Reporting System - Technical Documentation

Prepared for

Federal Communications
Commission

November 3, 1995

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4 1

# 1

# Introduction

The Cost Reporting Process technical documentation is the second of three parts of the final deliverable for the FCC cost management task. American Management Systems, Inc. (AMS) developed this document for the FCC under Contract 43-3JJJ-5-0833.

The purpose of this document is to provide the FCC with the technical specifications of the designed system. This includes explaining the types of tables used in the relational database, the relationships that exist between the tables, and the rules used to distribute the costs.

The Cost Reporting System (CRS) is the name of the application developed using Paradox for Windows 4.5. This version of the relational database was used as it is the version that the FCC currently supports. The programming language used to build the CRS is ObjectPAL. ObjectPAL is the built in object based language used by Paradox for Windows 4.5.

The CRS uses five main reference tables:

- Activity stores the predefined codes and names of valid FCC activities;
- Bureau stores the bureau code to which each organization belongs;
- Organization stores the valid organization codes and their names;
- Project stores the predefined codes and names of valid FCC projects; and
- Workload stores the cost data received from the Federal Financial System (FFS).

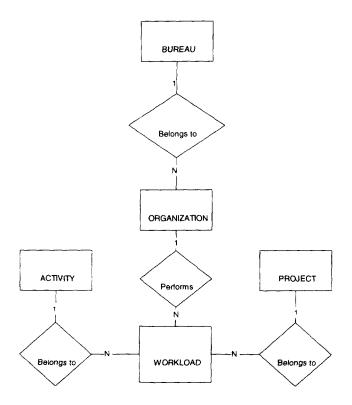
The CRS uses these tables as well as code written in ObjectPAL to provide FCC users with a friendly and easy-to-use graphical user interface environment.

# 2 Tables

The CRS uses five main database tables. These tables are Activity, Bureau, Organization, Project, and Workload. The relationships that exists between the tables are shown in the section Entity Relationship Diagram and each table's attributes are discussed in the subsequent sections.

# 2.1 Entity Relationship Diagram

This diagram shows the relationships that exist between the various table. These relationships serve to enforce referential integrity constraints such that invalid information cannot be entered into the tables. For example an organization listed in table ORGANIZATION must have a bureau code that is listed in table BUREAU.



If no match exists, the record in table ORGANIZATION would violate referential integrity constraints; the system would not allow such an entry to exist.

#### 2.2 Bureau

The BUREAU table contains information on the valid bureaus at the FCC. Each bureau at the FCC has been assigned a numeric primary key.

Field Name	Data Type (Size)	Description
Bureau Code	Numeric (2)	Primary key used to identify a bureau
Bureau Name	Text (50)	Official name assigned to the bureau

# 2.3 Activity

This table lists all of the valid activities. At present there are twelve activities. Four are budget activities, two are support activities, and six are accounting activities created to record specific accounting events.

Field Name	Data Type (Size)	Description
Activity Code	Numeric (2)	Primary key used to identify an activity
Activity Name	Text (50)	Official name assigned to the activity

# 2.4 Organization

The ORGANIZATION table lists all of the valid organizations at the FCC. In addition, each record in this table must contain a valid bureau code located in table BUREAU.

Field Name	Data Type (Size)	Description
Organization Code	Numeric (4)	Primary key used to identify an organization
Organization Name	Text (50)	Official name assigned to the organization
Bureau Code	Numeric (2)	Foreign key referencing data in table BUREAU

# 2.5 Projects

The FCC has determined a preset list of projects. All work must relate to one of the projects. These projects are listed in this table. Projects can be either for Section 8 Licensing Fees, Section 9 Regulatory Fees, Reimbursable Agreements, Spectrum Auctions, Bureau Support, Agency Support, or Leave.

Field Name	Data Type (Size)	Description
Project Code	Alphanumeric (3)	Primary key used to identify a project
Project Name	Text (50)	Official name assigned to the project

## 2.6 Workload

The table WORKLOAD contains all of the cost data arrayed by fiscal year, period, organization code, activity code, project code, and cost. The data from this table is imported from a flat file created by FFS.

Field Name	Data Type (Size)	Description
Fiscal Year	Numeric (2)	Primary key used to identify the fiscal year
Period	Numeric (2)	Primary key used to identify the period
Organization Code	Numeric (4)	Primary key used to identify the organization; must be a valid entry in table ORGANIZATION
Activity Code	Numeric (2)	Primary key used to identify the activity code; must be a valid entry in table ACTIVITY
Project Code	Alphanumeric (3)	Primary key used to identify the project code; must be a valid entry in table PROJECT
Cost	Numeric	Total dollar cost

# 2.7 Relationships

This section explains the rationale for the relationships between various tables in the relational database.